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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Re. Appellant.:	Steven V. Larson
Serial No.:	09/517,974
Filed:	March 3, 2000
For:	DOOR AND FRAME FOR AIR HANDLING UNIT
Examiner:	Gregory J. Strimbu
Group:	3634
Confirmation No.:	5719
Attorney:	Gerald E. Helget
Attorney Docket No.:	33097.3
Additional Fees:	Charge to Deposit Account 02-3732

BOX AF
Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

APPLICANT'S REVISED APPEAL BRIEF

Now comes the applicant by his attorney and submits three copies of this revised Appeal Brief, in furtherance of the Appeal, the notice of which was filed at the United States Patent and Trademark Office on December 6, 2001. A Notice of Non-Compliance was mailed May 16, 2002. The Notice of Non-Compliance stated that the Appellant failed to separately argue the limitations of each of the claims in the application that do not stand or fall together. Appellant's attorney Nelson R. Capes contacted the Examiner on July 9, 2002 about this requirement, and the Examiner left a message on attorney Capes' voice mail that

CERTIFICATE OF MAILING

I hereby certify that this document is being deposited with the United States Postal Service as First Class Mail, in an envelope addressed to BOX AF, Assistant Commissioner for Patents, Washington, D.C. 20231, on the date indicated below.

By Nelson R. Capes
Date 7/11/02

the objectionable text was those instances in the Appeal Brief where Appellant stated that "Claims xxx contain additional elements and limitations beyond an allowable base claim and are also allowable." This argument has been deleted from this revised Appeal Brief, which should now be in order for submission to the Board. References to the specification by page and line number have also been added to the Summary of the Invention section of this brief.

I. REAL PARTY IN INTEREST

The real party in interest is the assignee of U.S. Patent application no. 09/517,974, A.J. Manufacturing, Inc.

II. RELATED APPEALS AND INTERFERENCES

Applicant is unaware of any related appeals or interferences.

III. STATUS OF CLAIMS

The claims on appeal are claims 1-20; all of the claims on appeal have been rejected.

IV. STATUS OF AMENDMENTS

No amendments have been made after final rejection.

V. SUMMARY OF THE INVENTION

The present invention is a door and frame combination(10) for an air handling unit, the combination comprising:

(a) a frame(12), (page 4, line 4) ;

(b) a hinged door (14), (page 4, line 4) engaging the frame, the door comprising a front wall (20), (page 4, line 8) rear wall (22), (page 4, line 8) and side walls (24), (page 4, line 8) enclosing a hollow core (26), (page 4, line 8) and insulating material (28), (page 4, line 9) filling the hollow core; and

(c) a gasket (16), (page 4, line 16) between the door and the frame, the gasket further comprising a flexible gasket wall (16A), (page 4, line 16) with anti-roll extensions (16B), (page 4, line 17) and further comprising a friction-reducing material (16C), (page 4, line 18) on the gasket wall;

wherein the door and frame can withstand a pressure differential of up to six inches of air pressure, (page 5, line 16). The door and frame may also further comprise thermal pockets (30), (page 5, line 2) filled with a second insulating material.

VI. ISSUES

1. Are claims 1-20 unpatentable under 35 U.S.C. 112, second paragraph?

2. Are claims 1-4, 6-11, and 13-15 unpatentable under 35 U.S.C. 103(a) over McDonald in view of Ryan?

3. Are claims 1, 5, 9, 12, and 16-20 unpatentable under 35 U.S.C. 103(a) over Fuchs in view of McDonald, Ryan, and Colliander?

VII. GROUPING OF CLAIMS

The rejected claims in this application do not stand or fall together.

Claim 6 adds a further limitation to claim 1 of thermal pockets in the door and in the frame, the thermal pockets being filled with a second insulating material. This is believed to be separately patentable as the cited references do not disclose thermal pockets.

Claim 13 adds a further limitation to claim 9 of thermal pockets in the door and in the frame, the thermal pockets being filled with a second insulating material. This is believed to be separately patentable as the cited references do not disclose thermal pockets.

Claim 18 adds a further limitation to claim 16 of thermal pockets in the door and in the frame, the thermal pockets being filled with a second insulating material. This is believed to be separately patentable as the cited references do not disclose thermal pockets.

Each of these claims should be individually considered in light of this prior art for the reason that the respective claim language differs sufficiently as to require separate consideration.

VIII. ARGUMENT

Claims 1-20 are not unpatentable under 35 U.S.C. 112, second paragraph.

The Office Action rejected claims 1-20 as being unpatentable under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In particular, the Office Action objects to the recitation of "withstand" in various claims and to recitation of "six inches of air pressure" in various claims.

Claims need only "reasonably apprise those skilled in the art" for their scope and be "as precise as the subject matter permits."[1] The test of definiteness is whether one skilled in the art would understand the bounds of the claim when read in light of the specification.[2] If the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, § 112 demands no more.[3]

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[1] *Hybritech, Inc. v. Monoclonal Antibodies, Inc*, 802 F.2d 1367, 1385, 231 USPQ 81 (Fed. Cir. 1986) (citing *Shatterproof GlassCorp. v. Libbey-Owens Ford Co.*, 758 F.2d 613, 624, 225 USPQ 634, 641 (Fed. Cir. 1985)
[2] Id.
[3] *Id.*

A claim need not describe the invention, such description being provided by the specification's disclosure section.[4]

As to the limitation of "withstands," the meaning of this limitation is clearly recited in the Specification as follows:

> The air handling unit enclosure typically encloses heating, ventilation, and air conditioning equipment (HVAC). Because the HVAC equipment is used to maintain the building's temperature, it is important that the enclosure E and doors D of the air handling unit do not allow the passage of air into or out of the air handling unit. Because of this requirement, the air handling unit must be able to withstand the high external air pressure associated with gale force winds. Furthermore, the air pressure inside the air handling unit is typically lower than ambient air pressure outside the unit (sometimes by as much as six inches), and such a difference in air pressure can cause a pressure differential between the inside and outside of the unit equivalent to up to a 300 mph wind blowing against the unit and its doors. The doors must not leak air, even under such a high pressure. . . . Typical air handling units of the prior art are capable of withstanding six inches of pressure differential, but this is their limit. Specification, page 2 (emphasis supplied)

From the above quotation, one of ordinary skill in the art would know that "withstand" means to resist both a high external pressure caused by gale force winds and a high pressure differential across the door, without leakage of air. The claims, read in light of the specification, thus reasonably apprise those skilled in the art of the scope of the invention and are as precise as the subject matter permits.

As to the limitation of "six inches of air pressure," it is common practice to cite pressures in inches of mercury. The Office Action has not indicated that one of ordinary skill in the art would understand this limitation to mean anything other than "six inches of mercury." Furthermore, a common dictionary definition of "inch" is:

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[4] *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1 USPQ2d 1081 (Fed. Cir. 1986)

"A unit or degree of atmospheric or other pressure as measured by a barometer or manometer that is equal to the pressure balanced by a one-inch column of liquid, usually mercury, in the measuring device."[5]

Under the case law cited above, the claims meet the standard of definiteness of 35 U.S.C. 112, second paragraph.

Claims 1-4, 6-11, and 13-15 under 35 U.S.C. 103(a) are not unpatentable over McDonald in view of Ryan.

Applicant maintains that the Examiner has not established a *prima facie* case of obviousness. The Examiner bears the initial burden of presenting a *prima facie* case of obviousness.[6] If the Examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned.[7] "A *prima facie* case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art."[8]

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.[9] Second, there must be a reasonable expectation of success.[10] Finally, the prior art reference (or references when combined) must teach or suggest all claim limitations.[11] The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.[12]

The Examiner has not established a *prima facie* case of obviousness because the prior art relied upon does not disclose, suggest, or render obvious the claimed invention, either

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[5] The American Heritage Dictionary, Second College Ed., 1985.
[6] *In re Rijckaert*, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993).
[7] *Id.*
[8] *Id.*
[9] Manual of Patent Examining Procedures, §2143
[10] *Id.*
[11] *Id.*
[12] *Id.* (emphasis supplied)

individually or when combined[13], because the references to not teach or disclose all claimed limitations.

As to claims 1 and 9 the Examiner has not indicated where there is any disclosure in the references of the ability to withstand a pressure differential of up to six inches of air pressure. The Examiner has simply stated that McDonald discloses this limitation. Appellant believes this statement to be incorrect.

Appellant argues that claims 6 and 13 do not stand or fall together with the other claims of this group. As to claims 6 and 13, the Examiner has further not indicated where there is any disclosure in any of the cited references of thermal pockets (distinct from the door's core) that are filled with a second insulating material. In fact, the Examiner has not even stated in the Office Action that any of the cited references disclose this particular limitation.

Claims 1, 5, 9-12 and 16-20 are not unpatentable under 35 U.S.C. 103(a) over Fuchs in view of McDonald, Ryan, and Colliander.

Applicant maintains that the Examiner has not established a prima facie case of obviousness. The Examiner bears the initial burden of presenting a prima facie case of obviousness. If the Examiner fails to establish a prima facie case, the rejection is improper and will be overturned. "A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art."

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all claim limitations. The teaching or suggestion to make the claimed combination and the reasonable

[13] *Rijckart*, 28 USPQ2d at 1957

expectation of success must both be found in the prior art, and not based on applicant's disclosure.

The Examiner has not established a prima facie case of obviousness because the prior art relied upon does not disclose, suggest, or render obvious the claimed invention, either individually or when combined, because the references do not teach or suggest all claim limitations.

As to claims 1, 9, and 16, the Examiner has not indicated where there is any disclosure in the references of the ability to withstand a pressure differential of up to six inches of air pressure. The Examiner has simply stated that Fuchs discloses this limitation. Appellant believes this statement to be incorrect.

Appellant has indicated that claim 18 does not stand or fall together with the other claims of this group. As to claim 18, the Examiner has further not indicated where there is any disclosure in any of the cited references of thermal pockets (distinct from the door's core) that are filled with a second insulating material. In fact, the Examiner has not even stated in the Office Action that any of the cited references disclose this particular limitation.

In view of the foregoing, Appellant asks the Board to overturn the Examiner's rejections and allow all claims.

Respectfully submitted,

Dated: 7/11/02

By _____

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APPENDIX

1. A door and frame combination for an air handling unit, the combination comprising:

(a) a frame;

(b) a hinged door engaging the frame, the door comprising a front wall, rear wall, and side walls enclosing a hollow core and insulating material filling the hollow core; and

(c) a gasket between the door and the frame, the gasket further comprising a flexible gasket wall with anti-roll extensions;

wherein the door and frame can withstand a pressure differential of up to six inches of air pressure.

2. The door and frame combination of claim 1, wherein the insulating material is expanding polyurethane foam.

3. The door and frame combination of claim 2, wherein the side walls are two inches in width.

4. The door and frame combination of claim 1, wherein the gasket further comprises a central hollow core.

5. The door and frame combination of claim 1, wherein the gasket further comprises a friction-reducing material on the gasket wall.

6. The door and frame combination of claim 1, further comprising thermal pockets in the door and in the frame, the thermal pockets being filled with a second insulating material.

7. The door and frame combination of claim 6, wherein the second insulating material is high-density polyurethane.

8. The door and frame combination of claim 1, further comprising a window in the door.

9. A door and frame combination for an air handling unit, the combination comprising:

(a) a frame;

(b) a hinged door engaging the frame, the door further comprising a front wall, rear wall, and side walls enclosing a hollow core and insulating material filling the hollow core wherein the insulating material is expanding polyurethane foam; and

(c) a gasket between the door and the frame, the gasket further comprising a flexible gasket wall with anti-roll extensions;

wherein the door and frame can withstand a pressure differential of up to six inches of air pressure.

10. The door and frame combination of claim 9, wherein the side walls are two inches in width.

11. The door and frame combination of claim 9, wherein the gasket further comprises a central hollow core.

12. The door and frame combination of claim 9, wherein the gasket further comprises a friction-reducing material on the gasket wall.

13. The door and frame combination of claim 9, further comprising thermal pockets in the door and in the frame, the thermal pockets being filled with a second insulating material.

14. The door and frame combination of claim 13, wherein the second insulating material is high-density polyurethane.

15. The door and frame combination of claim 9, further comprising a window in the door.

16. A door and frame combination for an air handling unit, the combination comprising:

(a) a frame;

(b) a hinged door engaging the frame, the door further comprising a front wall, real wall, and side walls enclosing a hollow core and insulating material filling the hollow core; wherein the insulating material is expanding polyurethane foam; and

(c) a gasket between the door and the frame, the gasket further comprising a flexible gasket wall with anti-roll extensions, and further comprising a friction reducing material on the gasket wall;

wherein the door and frame can withstand a pressure differential of up to six inches of air pressure.

17. The door and frame combination of claim 16 wherein the gasket further comprises a central hollow core.

18. The door and frame combination of claim 16, further comprising thermal pockets in the door and in the frame, the thermal pockets being filled with high-density polyurethane.

19. The door and frame combination of claim 16, further comprising a window in the door.

20. The door and frame combination of claim 16, wherein the side walls are two inches in width.